

Safety Data Sheet

according to UK REACH Regulation

DINITROL 441 Spray

Revision date: 20.11.2024

Product code: 30441

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SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

DINITROL 441 Spray

UFI: 7H9Q-F2XY-F003-69CX

1.2. Relevant identified uses of the substance or mixture and uses advised against**Use of the substance/mixture**

Anti-corrosive coating

1.3. Details of the supplier of the safety data sheet**Manufacturer**

Company name:	DINOL GmbH	
Street:	Pyrmonter Strasse 76	
Place:	D-32676 Luegde	
Telephone:	+ 49 (0) 5281 982980	Telefax: + 49 (0) 5281 9829860
E-mail:	msds@dinol.com	
Contact person:	Labor	
Responsible Department:	msds@dinol.com	

Supplier

Company name:	Leading Solvent Supplies Limited
Street:	Marston Business Park, Rudgate
Place:	GB Tockwith, York YO26 7QF
E-mail:	enquiries@leading-solvents.co.uk
Internet:	www.leading-solvents.co.uk

1.4. Emergency telephone number: Giftnotruf Berlin: +49 30 30686 700 (Beratung in Deutsch und Englisch)**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Aerosol 1; H222-H229
Skin Irrit. 2; H315
Eye Irrit. 2; H319
Skin Sens. 1; H317
STOT SE 3; H336
STOT RE 2; H373
Aquatic Chronic 3; H412

Full text of hazard statements: see SECTION 16.

2.2. Label elements**GB CLP Regulation****Hazard components for labelling**

ethyl acetate
xylene
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)
Fatty acids, C18-unsatd., trimers, compds. with oleylamine
Fatty acids, tall-oil, compds. with oleylamine
Cobalt bis(2-ethylhexanoate)

Signal word: Danger

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Pictograms:



Hazard statements

H222	Extremely flammable aerosol.
H229	Pressurised container: May burst if heated.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H412	Harmful to aquatic life with long lasting effects.

Precautionary statements

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P260	Do not breathe mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Special labelling of certain mixtures

EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist. Restricted to professional users.
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Additional advice on labelling

The classification of the aerosol was carried out according to EC 1272/2008, Annex 1, point 1.1.3.7.

Labelling of packages where the contents do not exceed 125 ml

Signal word: Danger

Pictograms:



Hazard statements

H222-H229-H317-H412

Precautionary statements

P210-P211-P251-P280-P410+P412

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

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Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
141-78-6	ethyl acetate			20 - < 25 %
	205-500-4	607-022-00-5	01-2119475103-46	
	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3; H225 H319 H336 EUH066			
74-98-6	propane			12,5 - 20 %
	200-827-9	601-003-00-5	01-2119486944-21	
	Flam. Gas 1, Liquefied gas; H220 H280			
106-97-8	butane			5 - 10 %
	203-448-7	601-004-00-0	01-2119474691-32	
	Flam. Gas 1, Liquefied gas; H220 H280			
75-28-5	isobutane			5 - 10 %
	200-857-2	601-004-00-0	01-2119485395-27	
	Flam. Gas 1, Liquefied gas; H220 H280			
13463-67-7	titanium dioxide			5 - < 10 %
	236-675-5	022-006-00-2	01-2119489379-17	
	Carc. 2; H351			
	reaction mass of ethylbenzene and xylene			5 - < 10 %
	905-588-0		01-2119488216-32	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1; H226 H332 H312 H315 H319 H335 H373 H304			
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)			1 - < 5 %
	919-446-0		01-2119458049-33	
	Flam. Liq. 3, STOT SE 3, STOT RE 1, Asp. Tox. 1, Aquatic Chronic 2; H226 H336 H372 H304 H411 EUH066			
1330-20-7	xylene			1 - < 5 %
	215-535-7	601-022-00-9	01-2119488216-32	
	Flam. Liq. 3, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3, STOT RE 2, Asp. Tox. 1, Aquatic Chronic 3; H226 H332 H312 H315 H319 H335 H373 H304 H412			
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics			1 - < 5 %
	919-857-5		01-2119463258-33	
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1; H226 H336 H304 EUH066			
100-41-4	ethylbenzene			< 1 %
	202-849-4	601-023-00-4	01-2119489370-35	
	Flam. Liq. 2, Acute Tox. 4, STOT RE 2, Asp. Tox. 1; H225 H332 H373 H304			
	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified			< 1 %
	918-668-5		01-2119455851-35	
	Flam. Liq. 3, STOT SE 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 2; H226 H335 H336 H304 H411			
147900-93-4	Fatty acids, C18-unsatd., trimers, compds. with oleylamine			< 1 %
			01-2119971821-33	
	Acute Tox. 4, Skin Sens. 1, STOT RE 2, Aquatic Chronic 2; H302 H317 H373 H411			
85711-55-3	Fatty acids, tall-oil, compds. with oleylamine			< 1 %
	288-315-1		01-2119974148-28	

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	Eye Dam. 1, Skin Sens. 1A, STOT RE 2; H318 H317 H373	
136-52-7	Cobalt bis(2-ethylhexanoate)	< 0.1 %
	205-250-6	01-2119524678-29
	Repr. 2, Eye Irrit. 2, Skin Sens. 1A, Aquatic Chronic 3; H361f H319 H317 H412	

Full text of H and EUH statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
141-78-6	205-500-4	ethyl acetate	20 - < 25 %
		inhalation: LC50 = 50 mg/l (vapours); dermal: LD50 = >20000 mg/kg; oral: LD50 = 5620 mg/kg	
106-97-8	203-448-7	butane	5 - 10 %
		inhalation: LC50 = 273000 ppm (gases)	
13463-67-7	236-675-5	titanium dioxide	5 - < 10 %
		dermal: LD50 = > 10000 mg/kg; oral: LD50 = > 20000 mg/kg	
	905-588-0	reaction mass of ethylbenzene and xylene	5 - < 10 %
		inhalation: LC50 = 20 mg/l (vapours); inhalation: ATE = 4500 ppm (gases); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 4300 mg/kg	
	919-446-0	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	1 - < 5 %
		dermal: LD50 = >3400 mg/kg; oral: LD50 = >15000 mg/kg	
1330-20-7	215-535-7	xylene	1 - < 5 %
		inhalation: LC50 = 10-20 mg/l (vapours); inhalation: ATE = 4500 ppm (gases); dermal: LD50 = 2000 mg/kg; oral: LD50 = 8700 mg/kg	
	919-857-5	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	1 - < 5 %
		inhalation: LC50 = 5000 mg/l (vapours); dermal: LD50 = > 5000 mg/kg; oral: LD50 = > 5000 mg/kg	
100-41-4	202-849-4	ethylbenzene	< 1 %
		inhalation: LC50 = 17,2 mg/l (vapours); inhalation: ATE = 4500 ppm (gases); dermal: LD50 = 15400 mg/kg; oral: LD50 = 3500 mg/kg	
	918-668-5	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified	< 1 %
		inhalation: LC50 = >6193 mg/l (vapours); dermal: LD50 = >3160 mg/kg; oral: LD50 = 3492 mg/kg	
147900-93-4		Fatty acids, C18-unsatd., trimers, compds. with oleylamine	< 1 %
		oral: LD50 = > 1570 mg/kg	
85711-55-3	288-315-1	Fatty acids, tall-oil, compds. with oleylamine	< 1 %
		oral: LD50 = > 2000 mg/kg	
136-52-7	205-250-6	Cobalt bis(2-ethylhexanoate)	< 0.1 %
		dermal: LD50 = >2000 mg/kg; oral: LD50 = 3129 mg/kg	

Further Information

The homogeneous mixing of this product is controlled by continuous physical tests. Formerly dusty raw materials are completely integrated into the liquid/pasty mass. Possible AGW-values for solid substances are therefore not given, as there is no longer any risk of inhalation of these substances (when handling this mixture).

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice.
Never give anything by mouth to an unconscious person or a person with cramps.
If unconscious but breathing normally, place in recovery position and seek medical advice.

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After inhalation

Remove casualty to fresh air and keep warm and at rest.

If unconscious but breathing normally, place in recovery position and seek medical advice.

After contact with skin

Change contaminated clothing.

Wash with plenty of water/Soap.

If skin irritation occurs: Get medical advice/attention.

After contact with eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. In case of eye irritation consult an ophthalmologist.

After ingestion

If swallowed, rinse mouth with water (only if the person is conscious).

Call a physician immediately.

Put victim at rest, cover with a blanket and keep warm.

Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Nausea, Dizziness, Headache.

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

alcohol resistant foam, Carbon dioxide (CO₂), Extinguishing powder, Water fog.

Unsuitable extinguishing media

High power water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products: Danger of serious damage to health by prolonged exposure.

Do not inhale explosion and combustion gases. Use appropriate respiratory protection.

5.3. Advice for firefighters

Use water spray jet to protect personnel and to cool endangered containers.

Additional information

Use water spray jet to protect personnel and to cool endangered containers. Suppress gases/vapours/mists with water spray jet.

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Remove all sources of ignition. Provide adequate ventilation.

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wear personal protection equipment.

Avoid contact with skin, eyes and clothes.

For emergency responders

For further specification, refer to section 8 of the SDS.

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3. Methods and material for containment and cleaning up

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For containment

- Prevent spread over a wide area (e.g. by containment or oil barriers).
- Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).
- Treat the recovered material as prescribed in the section on waste disposal.

For cleaning up

- Provide adequate ventilation.
- Clear contaminated areas thoroughly.
- Do not rinse down with water.

Other information

- No information available.

6.4. Reference to other sections

- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13

SECTION 7: Handling and storage**7.1. Precautions for safe handling****Advice on safe handling**

- Handle and open container with care.
- If handled uncovered, arrangements with local exhaust ventilation have to be used.
- If local exhaust ventilation is not possible or not sufficient, the entire working area should be ventilated by technical means.

Advice on protection against fire and explosion

- Take precautionary measures against static discharges.
- Do not spray on naked flames or any incandescent material.
- Keep away from sources of ignition - No smoking.
- Heating causes rise in pressure with risk of bursting.

Advice on general occupational hygiene

- The usual precautionary measures are to be adhered to when handling chemicals.
- Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately.
- Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.
- Remove contaminated, saturated clothing immediately.
- Do not breathe gas/vapour/aerosol.

7.2. Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

- Keep container tightly closed in a cool, well-ventilated place.
- Do not keep the container sealed. Keep container dry.
- Keep away from heat. Protect from direct sunlight.

7.3. Specific end use(s)

- No information available.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters**

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Exposure limits (EH40)

CAS No	Substance	ppm	mg/m ³	fibres/ml	Category	Origin
106-97-8	Butane	600	1450		TWA (8 h)	WEL
		750	1810		STEL (15 min)	WEL
141-78-6	Ethyl acetate	200	734		TWA (8 h)	WEL
		400	1468		STEL (15 min)	WEL
100-41-4	Ethylbenzene	100	441		TWA (8 h)	WEL
		125	552		STEL (15 min)	WEL
14807-96-6	Talc respirable dust	-	1		TWA (8 h)	WEL
13463-67-7	Titanium dioxide, total inhalable	-	10		TWA (8 h)	WEL
1330-20-7	Xylene: mixed isomers	50	220		TWA (8 h)	WEL
		100	441		STEL (15 min)	WEL

Biological Monitoring Guidance Values (EH40)

CAS No	Substance	Parameter	Value	Test material	Sampling time
1330-20-7	Xylene, o-, m-, p- or mixed isomers	methyl hippuric acid (creatinine)	650 mmol/mol	urine	Post shift

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DNEL/DMEL values

CAS No	Substance			
DNEL type		Exposure route	Effect	Value
141-78-6	ethyl acetate			
Worker DNEL, long-term		inhalation	systemic	734 mg/m³
Worker DNEL, acute		inhalation	systemic	1468 mg/m³
Worker DNEL, long-term		inhalation	local	734 mg/m³
Worker DNEL, acute		inhalation	local	1468 mg/m³
Worker DNEL, long-term		dermal	systemic	63 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	367 mg/m³
Consumer DNEL, acute		inhalation	systemic	734 mg/m³
Consumer DNEL, long-term		dermal	systemic	37 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	4,5 mg/kg bw/day
	reaction mass of ethylbenzene and xylene			
Worker DNEL, long-term		inhalation	systemic	211 mg/m³
Worker DNEL, long-term		inhalation	local	221 mg/m³
Worker DNEL, acute		inhalation	systemic	442 mg/m³
Worker DNEL, long-term		dermal	systemic	180 mg/kg bw/day
Worker DNEL, acute		inhalation	local	289 mg/m³
Consumer DNEL, long-term		oral	systemic	1,6 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	14,8 mg/m³
Consumer DNEL, long-term		inhalation	local	65,3 mg/m³
Consumer DNEL, acute		inhalation	systemic	260 mg/m³
Consumer DNEL, acute		inhalation	local	260 mg/m³
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)			
Worker DNEL, long-term		inhalation	systemic	330 mg/m³
Worker DNEL, long-term		dermal	systemic	44 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	71 mg/m³
Consumer DNEL, long-term		dermal	systemic	26 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	26 mg/kg bw/day
1330-20-7	xylene			
Consumer DNEL, long-term		oral	systemic	1,6 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	180 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	108 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	77 mg/m³
Consumer DNEL, long-term		inhalation	systemic	14,8 mg/m³
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics			
Consumer DNEL, long-term		oral	systemic	125 mg/kg bw/day
Worker DNEL, long-term		dermal	systemic	208 mg/kg bw/day
Consumer DNEL, long-term		dermal	systemic	125 mg/kg bw/day
Worker DNEL, long-term		inhalation	systemic	871 mg/m³
Consumer DNEL, long-term		inhalation	systemic	185 mg/m³
100-41-4	ethylbenzene			

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Worker DNEL, long-term	inhalation	systemic	77 mg/m ³
Worker DNEL, acute	inhalation	local	293 mg/m ³
Worker DNEL, long-term	dermal	systemic	180 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	15 mg/m ³
Consumer DNEL, long-term	oral	systemic	1,6 mg/kg bw/day
Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified			
Consumer DNEL, long-term	oral	systemic	11 mg/kg bw/day
Worker DNEL, long-term	dermal	systemic	25 mg/kg bw/day
Consumer DNEL, long-term	dermal	systemic	11 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	150 mg/m ³
Consumer DNEL, long-term	inhalation	systemic	32 mg/m ³

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PNEC values

CAS No	Substance	
Environmental compartment		Value
141-78-6	ethyl acetate	
Freshwater		0,24 mg/l
Marine water		0,024 mg/l
Freshwater sediment		1,15 mg/kg
Marine sediment		0,115 mg/kg
Secondary poisoning		0,20 mg/kg
Micro-organisms in sewage treatment plants (STP)		650 mg/l
Soil		0,148 mg/kg
	reaction mass of ethylbenzene and xylene	
Freshwater		0,327 mg/l
Marine water		0,327 mg/l
Freshwater sediment		12,64 mg/kg
Marine sediment		12,64 mg/kg
Soil		2,31 mg/kg
1330-20-7	xylene	
Freshwater		0,327 mg/l
Marine water		0,327 mg/l
Freshwater sediment		12,46 mg/kg
Marine sediment		12,46 mg/kg
Micro-organisms in sewage treatment plants (STP)		6,58 mg/l
Soil		2,31 mg/kg
100-41-4	ethylbenzene	
Freshwater		0,1 mg/l
Marine water		0,01 mg/l
Freshwater sediment		13,7 mg/kg
Marine sediment		1,37 mg/kg
Secondary poisoning		0,02 mg/kg
Micro-organisms in sewage treatment plants (STP)		9,6 mg/l
Soil		2,68 mg/kg

8.2. Exposure controls



Appropriate engineering controls

Provide adequate ventilation.

If handled uncovered, arrangements with local exhaust ventilation should be used if possible.

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

Individual protection measures, such as personal protective equipment

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Eye/face protection

Eye glasses with side protection (EN 166)

Hand protection

Tested protective gloves must be worn (EN ISO 374):

FKM (fluoro rubber), Breakthrough time::

PVA (Polyvinyl alcohol), Breakthrough time::

NBR (Nitrile rubber), Breakthrough time::

Butyl caoutchouc (butyl rubber), Breakthrough time::

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves have to be replaced at the first sign of deterioration.

Protect skin by using skin protective cream.

Skin protection

Wear anti-static footwear and clothing

Respiratory protection

Work in well-ventilated zones or use proper respiratory protection.

gas filtering equipment (EN 141), Filter material/medium: A/P2

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Aerosol	
Colour:	white	
Odour:	characteristic	
Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not applicable
Flammability:		not applicable
		not applicable
Lower explosion limits:		1,5 vol. %
Upper explosion limits:		10,9 vol. %
Flash point:		< -10 °C
Auto-ignition temperature:		365 °C
Decomposition temperature:		not determined
pH-Value:		not determined
Viscosity / kinematic:		not determined
Water solubility:	The study does not need to be conducted because the substance is known to be insoluble in water.	
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		4000 hPa
Density (at 20 °C):		0,83 g/cm³
Relative vapour density:		not determined

9.2. Other information

Information with regard to physical hazard classes

Explosive properties

not determined

Self-ignition temperature

Solid:

not applicable

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Gas:

not applicable

Oxidizing properties

not determined

Other safety characteristics

Evaporation rate:

not determined

Solvent content:

72,0 %

Solid content:

28,0 %

Viscosity / dynamic:

not determined

Further Information

No information available.

SECTION 10: Stability and reactivity**10.1. Reactivity**

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

Keep away from heat. Ignition hazard.

10.5. Incompatible materials

No information available.

10.6. Hazardous decomposition products

Carbon monoxide

SECTION 11: Toxicological information**11.1. Information on hazard classes as defined in GB CLP Regulation****Acute toxicity**

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 5000 mg/kg; ATE (inhalation gas) > 20000 ppm

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CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
141-78-6	ethyl acetate				
	oral	LD50 mg/kg 5620	Rat		
	dermal	LD50 mg/kg >20000	Rabbit		
	inhalation (4 h) vapour	LC50 50 mg/l	Rat		
106-97-8	butane				
	inhalation (4 h) gas	LC50 ppm 273000	Rat	GESTIS	
13463-67-7	titanium dioxide				
	oral	LD50 mg/kg > 20000	Rat		
	dermal	LD50 mg/kg > 10000	Rabbit		
	reaction mass of ethylbenzene and xylene				
	oral	LD50 mg/kg 4300	Rat		
	dermal	LD50 mg/kg > 2000	Rabbit		
	inhalation (4 h) vapour	LC50 20 mg/l	Rat		
	inhalation gas	ATE ppm 4500			
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)				
	oral	LD50 mg/kg >15000	Rat		
	dermal	LD50 mg/kg >3400	Rat		
1330-20-7	xylene				
	oral	LD50 mg/kg 8700	Rat		
	dermal	LD50 mg/kg 2000	Rabbit		
	inhalation (4 h) vapour	LC50 mg/l 10-20	Rat		
	inhalation gas	ATE ppm 4500			
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics				
	oral	LD50 mg/kg > 5000	Rat		
	dermal	LD50 mg/kg > 5000	Rabbit		
	inhalation (4 h) vapour	LC50 5000 mg/l	Rat		
100-41-4	ethylbenzene				
	oral	LD50 mg/kg 3500	Rat	GESTIS	
	dermal	LD50 mg/kg 15400	Rabbit	GESTIS	
	inhalation (4 h) vapour	LC50 17,2 mg/l	Rat		

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	inhalation gas	ATE ppm	4500			
	Solvent naphtha (petroleum), light arom.; Low boiling point naphtha - unspecified					
	oral	LD50 mg/kg	3492	Rat		
	dermal	LD50 mg/kg	>3160	Rabbit		
	inhalation vapour	LC50 mg/l	>6193	Rat		
147900-93-4	Fatty acids,C18-unsatd. , trimers, compds. with oleylamine					
	oral	LD50 mg/kg	> 1570	Rat		
85711-55-3	Fatty acids, tall-oil, compds. with oleylamine					
	oral	LD50 mg/kg	> 2000	Rat		
136-52-7	Cobalt bis(2-ethylhexanoate)					
	oral	LD50 mg/kg	3129	Rat		
	dermal	LD50 mg/kg	>2000	Rat		

Irritation and corrosivity

Skin corrosion/irritation: Causes skin irritation.

Serious eye damage/eye irritation: Causes serious eye irritation.

Sensitising effects

May cause an allergic skin reaction. (Fatty acids,C18-unsatd. , trimers, compds. with oleylamine; Fatty acids, tall-oil, compds. with oleylamine; Cobalt bis(2-ethylhexanoate))

Carcinogenic/mutagenic/toxic effects for reproduction

Germ cell mutagenicity: Based on available data, the classification criteria are not met.

Carcinogenicity: Based on available data, the classification criteria are not met.

Reproductive toxicity: Based on available data, the classification criteria are not met.

STOT-single exposure

May cause drowsiness or dizziness. (ethyl acetate)

STOT-repeated exposure

May cause damage to organs through prolonged or repeated exposure. (Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%))

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Endocrine disrupting properties

Endocrine disrupting potential No information available.

Further information

There are no data available on the preparation/mixture itself.

SECTION 12: Ecological information

12.1. Toxicity

Harmful to aquatic life with long lasting effects.

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CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
141-78-6	ethyl acetate					
	Acute fish toxicity	LC50 230 mg/l	96 h	Pimephales promelas (fathead minnow)		
	Acute algae toxicity	ErC50 3300 mg/l		Desmodesmus subspicatus	48 h	
	Acute crustacea toxicity	EC50 717 mg/l	48 h	Daphnia magna (Big water flea)		
	Acute bacteria toxicity	EC50 2900 mg/l ()		Pseudomonas putida	16 h	
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)					
	Acute fish toxicity	LL50 10-30 mg/l	96 h	Oncorhynchus mykiss (Rainbow trout)		
	Acute algae toxicity	ErC50 4,6 mg/l	72 h	Pseudokirchneriella subcapitata		
	Acute crustacea toxicity	EL50 10-22 mg/l	48 h	Daphnia magna (Big water flea)		
1330-20-7	xylene					
	Acute fish toxicity	LC50 86 mg/l	96 h	Leuciscus idus (golden orfe)		
	Acute algae toxicity	ErC50 2-8 mg/l		Selenastrum capricornutum		
	Acute crustacea toxicity	EC50 1-10 mg/l	48 h			
100-41-4	ethylbenzene					
	Acute fish toxicity	LC50 80 mg/l	96 h	fish	GESTIS	
	Acute algae toxicity	ErC50 5 mg/l	72 h	alga	GESTIS	
	Acute crustacea toxicity	EC50 4,75 mg/l	48 h		GESTIS	

12.2. Persistence and degradability

There are no data available on the mixture itself.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
141-78-6	ethyl acetate			
	OECD 301D/ EEC 92/69/V, C.4-E	100 %	28	
	Readily biodegradable (according to OECD criteria).			
	Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)			
		74,7 %	28	
	Leicht biologisch abbaubar			
	Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics			
		80%		
	Readily biodegradable (according to OECD criteria).			

12.3. Bioaccumulative potential

There are no data available on the mixture itself.

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Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
141-78-6	ethyl acetate	0,73
106-97-8	butane	2,89
100-41-4	ethylbenzene	3,15

12.4. Mobility in soil

There are no data available on the mixture itself.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Dispose of waste according to applicable legislation. Do not mix with other wastes.

List of proposed waste codes/waste designations in accordance with EWC:

List of Wastes Code - residues/unused products

160504 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; gases in pressure containers (including halons) containing hazardous substances; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Remove according to the regulations.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2
14.4. Packing group: -
 Hazard label: 2.1



Classification code: 5F
 Special Provisions: 190 327 344 625
 Limited quantity: 1 L
 Transport category: 2
 Tunnel restriction code: D

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Other applicable information (land transport)

E0

Marine transport (IMDG)

14.1. UN number or ID number: UN 1950
14.2. UN proper shipping name: AEROSOLS
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
Hazard label: 2.1



Marine pollutant: no
Special Provisions: 63, 190, 277, 327, 344, 959
Limited quantity: 1000 mL
Excepted quantity: E0
EmS: F-D, S-U

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number or ID number: UN 1950
14.2. UN proper shipping name: AEROSOLS, flammable
14.3. Transport hazard class(es): 2.1
14.4. Packing group: -
Hazard label: 2.1



Special Provisions: A145 A167 A802
Limited quantity Passenger: 30 kg G
IATA-packing instructions - Passenger: 203
IATA-max. quantity - Passenger: 75 kg
IATA-packing instructions - Cargo: 203
IATA-max. quantity - Cargo: 150 kg

Other applicable information (air transport)

E0

Passenger-LQ: Y203

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

Warning: Gases under pressure

14.7. Maritime transport in bulk according to IMO instruments

not applicable

Other applicable information

Stowage Code:

SW1 Protected from sources of heat.

SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.

Segregation Code:

SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.

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SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulatory information**

Restrictions on use (REACH, annex XVII):

Entry 28, Entry 40, Entry 75

Directive 2004/42/EC on VOC in paints and varnishes: 72,0 % (595 g/l)

Additional information

Observe in addition any national regulations!

Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work

National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC). Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.

Water hazard class (D): 2 - obviously hazardous to water

Additional information

This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH: none

15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics

SECTION 16: Other information**Changes**

This data sheet contains changes from the previous version in section(s): 8,9,11,14,16.

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Abbreviations and acronyms

Flam. Gas: Flammable gases
 Aerosol: Aerosols
 Liquefied gas
 Flam. Liq: Flammable liquids
 Acute Tox: Acute toxicity
 Asp. Tox: Aspiration hazard
 Skin Irrit: Skin irritation
 Eye Dam: Eye damage
 Eye Irrit: Eye irritation
 Skin Sens: Skin sensitisation
 Carc: Carcinogenicity
 Repr: Reproductive toxicity
 STOT SE: Specific target organ toxicity - single exposure
 STOT RE: Specific target organ toxicity - repeated exposure
 Aquatic Chronic: Chronic aquatic hazard
 ADR: Accord européen sur le transport des marchandises dangereuses par Route
 (European Agreement concerning the International Carriage of Dangerous Goods by Road)
 IMDG: International Maritime Code for Dangerous Goods
 IATA: International Air Transport Association
 GHS: Globally Harmonized System of Classification and Labelling of Chemicals
 EINECS: European Inventory of Existing Commercial Chemical Substances
 ELINCS: European List of Notified Chemical Substances
 CAS: Chemical Abstracts Service
 LC50: Lethal concentration, 50%
 LD50: Lethal dose, 50%

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Aerosol 1; H222-H229	On basis of test data
Skin Irrit. 2; H315	Bridging principle "Aerosols"
Eye Irrit. 2; H319	Bridging principle "Aerosols"
Skin Sens. 1; H317	Bridging principle "Aerosols"
STOT SE 3; H336	Bridging principle "Aerosols"
STOT RE 2; H373	Bridging principle "Aerosols"
Aquatic Chronic 3; H412	Calculation method

Relevant H and EUH statements (number and full text)

H220 Extremely flammable gas.
 H222 Extremely flammable aerosol.
 H225 Highly flammable liquid and vapour.
 H226 Flammable liquid and vapour.
 H229 Pressurised container: May burst if heated.
 H280 Contains gas under pressure; may explode if heated.
 H302 Harmful if swallowed.
 H304 May be fatal if swallowed and enters airways.
 H312 Harmful in contact with skin.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H318 Causes serious eye damage.
 H319 Causes serious eye irritation.
 H332 Harmful if inhaled.
 H335 May cause respiratory irritation.
 H336 May cause drowsiness or dizziness.
 H351 Suspected of causing cancer.

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H361f	Suspected of damaging fertility.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

This safety data sheet complies with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)